SEMICONDUCTOR DEVICE

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Abstract

PURPOSE:To prevent hydrogen from being diffused into a gate insulating film with an antireflection film constituted of an SiOn thin film being kept existing by letting a gate electrode include a titanium layer. CONSTITUTION:On an Si substrate 1 where element isolation regions 2 and a gate insulating film 3 are formed, a gate electrode 9 which is constituted of a polysilicon layer 4, a Ti layer 5 and a titanium silicide layer 6 which is put between the other two layers 4 and 5 is formed. On the gate electrode 9, an antireflection film 7 constituted of an SiOn system thin film is deposited in the same pattern as the gate electrode 9. Due to this structure, a hot carrier resistance is remarkably increased compared with the conventional MOS transistor which has no Ti layer 5 in the gate electrode 9. Therefore, even if the antireflection films 7, 18 which are constituted of Sign system thin films are kept existing, hydrogen is prevented by the Ti layer 5 included in the gate electrode 9 from reaching the gate insulating film 3.